CLASSIFICATION AND CORRELATION

OF

THE SOILS OF

KNOX COUNTY

ILLINOIS

MARCH 1983

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
MIDWEST NATIONAL TECHNICAL CENTER
LINCOLN, NEBRASKA

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Midwest National Technical Center
Lincoln, Nebraska 68501

Classification and Correlation of the Soils of Knox County, Illinois

The final correlation was prepared at the MNTC in Lincoln, Nebraska, January 1983. It was handled by correspondence between J. Wiley Scott, assistant state soil scientist, and Steve R. Base, soil correlator. The draft copy of the manuscript, compiled maps, correlation samples, field correlation, field notes, and laboratory data were available to prepare this correlation. Steve R. Base also participated in the comprehensive field review the week of August 24, 1981.

Headnote for Detailed Soil Survey Legend:
Map symbols consist of numbers or a combination of numbers and letters. The initial numbers represent the kind of soil. A capital letter following these numbers indicates the class of slope. Symbols without a slope letter are for nearly level soils or miscellaneous areas. A final number of 2 following the slope letter indicates that the soil is moderately eroded and 3 that it is severely eroded.

SOIL CORRELATION OF KNOX COUNTY, ILLINOIS

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
7D3, 7D2, 119D3, 7E2, 119E3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded	7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded
8D2, 8D3	Hickory silt loam, 10 to 15 percent slopes, eroded	8D2	Hickory silt loam, 10 to 15 percent slopes, eroded
8E2, 8E3, 8F, 8F3, 8E, 936F, 936E2, 8F2, 25F, 25G	Hickory silt loam, 15 to 30 percent slopes, eroded	8E2	Hickory silt loam, 15 to 30 percent slopes, eroded
8G, 8G2	Hickory loam, 30 to 50 percent slopes	8G	Hickory loam, 30 to 50 percent slopes
17, 17A	Keomah silt loam, 1 to 3 percent slopes	17	Keomah silt loam
19C3, 19C2, 279C3, 280C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded	19C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded
19D3, 19D2, 280D3	Sylvan silty clay loam, 10 to 15 percent slopes, severely eroded	19D3	Sylvan silty clay loam, 10 to 15 percent slopes, severely eroded
36B	Tama silt loam, 1 to 4 percent slopes	36B	Tama silt loam, 1 to 4 percent slopes
36B2	Tama silty clay loam, 2 to 5 percent slopes, eroded	36B2	Tama silty clay loam, 2 to 5 percent slopes, eroded
36C2	Tama silty clay loam, 5 to 10 percent slopes, eroded	36C2	Tama silty clay loam, 5 to 10 percent slopes, eroded

KNOX COUNTY, ILLINOIS --Continued

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
36D2, 36D	Tama silty clay loam, 10 to 15 percent slopes, eroded	36D2	Tama silty clay loam, 10 to 15 percent slopes, eroded
43A, 41A, 41	Ipava silt loam, 1 to 3 percent slopes	43A	Ipava silt loam, 0 to 3 percent slopes
45, 16	Denny silt loam	45	Denny silt loam
68, 244	Sable silty clay loam	68	Sable silty clay loam
74, 74A	Radford silt loam, 1 to 3 percent slopes	74	Radford silt loam
77, 73A, 73, 78A, 78B, 77A	Huntsville silt loam, 1 to 3 percent slopes	77	Huntsville silt loam
81B, 428A, 430B, 373, 428, 430A, 37A, 81A	Littleton silt loam, 1 to 3 percent slopes	81B	Littleton silt loam, 1 to 3 percent slopes
104, 242A, 104A, 149, 184, 132A, 149A, 132	Virgil silt loam	104	Virgil silt loam
107+, 402, 76, 107	Sawmill silty clay loam	107+	Sawmill silty clay loam, overwash
119D2, 119C2	Elco silt loam, 8 to 15 percent slopes, eroded	119D2	Elco silt loam, 8 to 15 percent slopes, eroded
119E2, 7E, 7F, 7F2, 119F2	Elco silt loam, 15 to 20 percent slopes, eroded	119E2	Elco silt loam, 15 to 20 percent slopes, eroded
131B, 87B, 175B, 131C2	Alvin sandy loam, 4 to 8 percent slopes, eroded	131B	Alvin sandy loam, 2 to 6 percent slopes
131D, 323D2, 131D2	Alvin sandy loam, 8 to 15 percent slopes, eroded	131D	Alvin sandy loam, 8 to 15 percent slopes

KNOX COUNTY, ILLINOIS --Continued

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
131E, 131E2, 175E2	Alvin sandy loam, 15 to 30 percent slopes	131E	Alvin sandy loam, 15 to 30 percent slopes
134B, 243B	Camden silt loam, 2 to 5 percent slopes	134B	Camden silt loam, 2 to 5 percent slopes
134C2, 243C2, 570C2, 344C2, 199C2, 199D2, 105C2	Camden silt loam, 5 to 10 percent slopes, eroded	134C2	Camden silt loam, 5 to 10 percent slopes, eroded
134D2, 570E2, 570D2	Camden silt loam, 10 to 20 percent slopes, eroded	134D2	Camden silt loam, 10 to 18 percent slopes, eroded
239, 333, 333A, 449, 449A	Dorchester silt loam	239	Dorchester silt loam
249, 138, 330, V138	Edinburg silty clay loam	249	Edinburg silty clay loam
257, 61A, T257A, 61, 257A	Clarksdale silt loam, 1 to 3 percent slopes	257	Clarksdale silt loam
259C2	Assumption silt loam, 5 to 10 percent slopes, eroded	259C2	Assumption silt loam, 5 to 10 percent slopes, eroded
259D2	Assumption silt loam, 10 to 15 percent slopes, eroded	259D2	Assumption silt loam, 10 to 15 percent slopes, eroded
259D3, 259C3	Assumption silty clay loam, 8 to 15 percent slopes, severely eroded	259D3	Assumption silty clay loam, 8 to 15 percent slopes, severely eroded
279B, 18B	Rozetta silt loam, 1 to 5 percent slopes	279B	Rozetta silt loam, 1 to 5 percent slopes
279C2, 18C2	Rozetta silt loam, 5 to 12 percent slopes, eroded	279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded

KNOX COUNTY, ILLINOIS --Continued

Field symbols	Field mapping unit name	Publication symbol	Approved mapping unit name
280B	Fayette silt loam, 2 to 5 percent slopes	280B	Fayette silt loam, 2 to 5 percent slopes
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded	280C2	Fayette silt loam, 5 to 10 percent slopes, eroded
280D2	Fayette silt loam, 10 to 15 percent slopes, eroded	280D2	Fayette silt loam, 10 to 15 percent slopes, eroded
280E, 280E2, 19E2	Fayette silt loam, 15 to 25 percent slopes	280E	Fayette silt loam, 15 to 25 percent slopes
344B, 148B, 199B, 105B	Harvard silt loam, 1 to 5 percent slopes	344B	Harvard silt loam, 1 to 5 percent slopes
386B, T386B	Downs silt loam, 2 to 6 percent slopes	386B	Downs silt loam, 2 to 6 percent slopes
415, 415A	Orion silt loam	415	Orion silt loam
451, 451A	Lawson silt loam, 0 to 3 percent slopes	451	Lawson silt loam
533	Urban land	533	Urban land
536, 536A, 536G	Dumps, mine	536	Dumps, mine
549D2, 551D2, 539D2, V551D, 538D2, 540D2	Marseilles silt loam, 10 to 15 percent slopes, eroded	549D2	Marseilles silt loam, 10 to 15 percent slopes, eroded
549E, 551E2, V551E, 551F, 539E2, 538E2, 540E2, 918E2, 967E2, 967E	Marseilles silt loam, 15 to 30 percent slopes, eroded	549E	Marseilles silt loam, 15 to 30 percent slopes
549G, 551G, 551G2, V551G, 539G, 538G, 540G, 918G, 967G	Marseilles silt loam, 30 to 60 percent slopes	549G	Marseilles silt loam, 30 to 60 percent slopes

KNOX COUNTY, ILLINOIS --Continued

Field symbols	Field mapping unit name	Publi-cation symbol	Approved mapping unit name
567B2	Elkhart silty clay loam, 3 to 5 percent slopes, eroded	567B2	Elkhart silty clay loam, 3 to 5 percent slopes, eroded
567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded	567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded
567D3, 567C3, 36C3, 36D3, 567D2	Elkhart silty clay loam, 8 to 15 percent slopes, severely eroded	567D3	Elkhart silty clay loam, 8 to 15 percent slopes, severely eroded
660C2, 660D2	Coatsburg silty clay loam, 5 to 12 percent slopes, eroded	660C2	Coatsburg silty clay loam, 5 to 12 percent slopes, eroded
801B, 392, 801	Orthents, silty	801B	Orthents, silty, gently sloping
802B, 802	Orthents, loamy	802B	Orthents, loamy, gently sloping
863	Pits, clay	863	Pits, clay
864	Pits, quarries	864	Pits, quarries
865	Pits, gravel	865	Pits, gravel
871B, 803B	Lenzburg silty clay loam, 1 to 7 percent slopes	871B	Lenzburg silty clay loam, 1 to 7 percent slopes
871D, 802D, 803D	Lenzburg silt loam, 7 to 20 percent slopes	871D	Lenzburg silt loam, 10 to 20 percent slopes
871G, 803G, 802E, 802G, 803E	Lenzburg loam, 20 to 70 percent slopes	871G	Lenzburg loam, 20 to 70 percent slopes
872B, 873B	Rapatee silty clay loam, 1 to 7 percent slopes	872B	Rapatee silty clay loam, 1 to 7 percent slopes

KNOX COUNTY, ILLINOIS --Continued

Field symbols	Field mapping unit name	Publi-cation symbol	Approved mapping unit name
2036C, 2036B	Tama-Urban land complex, 3 to 10 percent slopes	2036C	Tama-Urban land complex, 3 to 10 percent slopes
2901B, 934B	Ipava-Urban land-Tama complex, 1 to 5 percent slopes	2901B	Ipava-Urban land-Tama complex, 1 to 5 percent slopes
2902A, 935A	Ipava-Urban land-Sable complex, 0 to 3 percent slopes	2902A	Ipava-Urban land-Sable complex, 0 to 3 percent slopes

Series Established by This Correlation:

Rapatee (Knox County, Illinois)

Series Dropped or Made Inactive:

None

Certification Statement:
The state soil scientist certifies that:

1. The soil mapping was completed June 16, 1982.

2. The joining has been checked for both the general soil map and the detailed maps. Only Henry County on the north has a completed modern soil survey. The adjoining map units that differ are discussed in the field correlation. Mercer County on the northern end of the west boundary, and Peoria County on the southern half of the east boundary have project soil surveys underway.

In a few places along the Knox and Henry County line the names of adjoining associations are different because the extent of the major soils is different. The soils and/or parent materials in these associations are similar and have similar potential for broad land use planning. Peoria and Mercer Counties are still developing their general soil maps.

Other counties that join Knox County are Fulton, Stark, and Warren. Fulton County has a general soil map dated July 1971 and another dated November 1977.

Stark County has an old soil report dated June 1939, but no general soil map. Warren County has a general soil map dated August 1970. These maps were used as a guide for slopes and soil forming materials in the design and pattern of soil associations in Knox County.

3. Soil interpretations have been coordinated and agree with those on the soil interpretations records.

4. The location of typical pedons of soil series used in this survery area have been checked against the soil maps and are located in mapped areas of the named soil. The legal descriptions are correct. The locations are marked on the soil maps by the standard spot symbol for soil sample sites.

Verification of Exact Cooperator Names:
For the front cover:

United States Department of Agriculture
Soil Conservation Service
in cooperation with
Illinois Agricultural Experiment Station

The cooperators listed on the inside of the front cover are: This survey was made cooperatively by the Soil Conservation Service and the Illinois Agricultural Experiment Station. It is part of the technical assistance provided to the Knox County Soil and Water Conservation District. The cost was shared by the Knox County Board. This soil survey is Illinois Agricultural Experiment Station Report No. 121.

Disposition of Field Sheets:
The soil maps have been compiled on halftone film postitive altas sheets at a scale of 1:15,840. They have been joined and color checked for accuracy. All the compiled maps, along with the field sheets, names overlay, and other map finishing materials, have been delivered to the map finishing unit at the Illinois state office.

Prior Soil Survey Publications:
The first soil survey of Knox County was published in 1904. Coffey, George N., C. W. Ely, and C. J. Mann. 1904. Soil Survey of Knox County, Illinois. U.S.D.A. Bureau of Soils. The next one was published in 1913. Hopkins, Cyril G., J. G. Mosier, J. H. Pettit, and J. E. Readhimer. 1913. Knox County Soils. University of Illinois Agricultural Experiment Station Soil Report No. 6. In 1977 a generalized report was published. Ferhrenbacher, J. B., I. J. Jansen, B. W. Ray, J. D. Alexander, and T. S. Harris. 1977. Soil Associations of Knox County, Illinois. University of Illinois Agricultural Experiment Station Special Publication 46. This survey updates the preceding survey and provides additional information and larger scale maps that show soils in greater detail.

Instructions for Map Finishing:
Map finishing will be completed in the map finishing unit at the Illinois state office using the soil identification legend, conversion legend, and the special symbols legend approved in this document.

SCS-SOILS-37A
3-75

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Soil Survey Area: Knox County
State: Illinois

Date: 1/83

CULTURAL FEATURES

BOUNDARIES

County or parish

Reservation (national forest or park, state forest or park, and large airport)

Field sheet matchline & neatline

AD HOC BOUNDARY (label)

Small airport, airfield, park, oilfield, cemetery, or flood pool

LAND DIVISION CORNERS (sections and land grants)

ROADS

Coded on overlay to County Highway Map with Map Finishing materials.

DAMS

Large (to scale)

Medium or small

PITS

Gravel pit <2 acres

CULTURAL FEATURES (cont.)

WATER FEATURES

DRAINAGE

Perennial, double line

Perennial, single line

Intermittent

Drainage end

LAKES, PONDS AND RESERVOIRS

Perennial

MISCELLANEOUS WATER FEATURES

Marsh or swamp

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SOIL SYMBOLS

ESCARPMENTS 36C2 45

Other than bedrock

Drafted on field sheets as

SHORT STEEP SLOPE

DEPRESSION OR SINK

SOIL SAMPLE SITE (normally not shown)

MISCELLANEOUS

Gravelly spot

Sandy spot

Severely eroded spot

PRIME FARMLAND

[Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name]

Map symbol	Soil name
17	Keomah silt loam (where drained)
36B	Tama silt loam, 1 to 4 percent slopes
36B2	Tama silty clay loam, 2 to 5 percent slopes, eroded
43A	Ipava silt loam, 0 to 3 percent slopes
45	Denny silt loam (where drained)
68	Sable silty clay loam (where drained)
74	Radford silt loam
77	Huntsville silt loam
81B	Littleton silt loam, 1 to 3 percent slopes
104	Virgil silt loam (where drained)
107+	Sawmill silty clay loam, overwash (where drained) 1/
131B	Alvin sandy loam, 2 to 6 percent slopes
134B	Camden silt loam, 2 to 5 percent slopes
239	Dorchester silt loam
249	Edinburg silty clay loam (where drained)
257	Clarksdale silt loam (where drained)
279B	Rozetta silt loam, 1 to 5 percent slopes
280B	Fayette silt loam, 2 to 5 percent slopes
344B	Harvard silt loam, 1 to 5 percent slopes
386B	Downs silt loam, 2 to 6 percent slopes
415	Orion silt loam 1/
451	Lawson silt loam
567B2	Elkhart silty clay loam, 3 to 5 percent slopes, eroded
871B	Lenzburg silty clay loam, 1 to 7 percent slopes
872B	Rapatee silty clay loam, 1 to 7 percent slopes

1/ Where flooded less often than once in two years during the growing season.

Approved: March 7, 1983

Rodney F. Harner

RODNEY F. HARNER
Head, Soils Staff
Midwest NTC

CONVERSION LEGEND FOR KNOX COUNTY, ILLINOIS

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
T257A	257	36D3	567D3	132	104	333A	239
T386B	386B	37A	81B	132A	104	344B	344B
V138	249	37B	81B	134B	134B	344C2	134C2
V551D	549D2	41	43A	134C2	134C2	386B	386B
V551E2	549E	41A	43A	134D2	134D2	392	801B
V551G	549G	43A	43A	138	249	402	107+
7D2	7D3	45	45	148B	344B	415	415
7D3	7D3	61	257	149	104	415A	415
7E	119E2	61A	257	149A	104	428	81B
7E2	7D3	68	68	175B	131B	428A	81B
7F	119E2	73	77	175E2	131E	430A	81B
7F2	119E2	73A	77	184	104	430B	81B
8D2	8D2	74	74	199B	344B	449	239
8D3	8D2	74A	74	199C2	134C2	449A	239
8E	8E2	76	107+	199D2	134C2	451	451
8E2	8E2	77	77	239	239	451A	451
8E3	8E2	77A	77	242A	104	533	533
8F	8E2	78A	77	243B	134B	536	536
8F2	8E2	78B	77	243C2	134C2	536A	536
8F3	8E2	81A	81B	244	68	536G	536
8G	8G	81B	81B	249	249	538D2	549D2
8G2	8G	87B	131B	257	257	538E2	549E
16	45	104	104	257A	257	538G	549G
17	17	104A	104	259C2	259C2	539D2	549D2
17A	17	105B	344B	259C3	259D3	539E2	549E
18B	279B	105C2	134C2	259D2	259D2	539G	549G
18C2	279C2	107	107+	259D3	259D3	540D2	549D2
19C2	19C3	107+	107+	279B	279B	540E2	549E
19C3	19C3	119C2	119D2	279C2	279C2	540G	549G
19D2	19D3	119D2	119D2	279C3	19C3	549D2	549D2
19D3	19D3	119D3	7D3	280B	280B	549E2	549E
19E2	280E	119E2	119E2	280C2	280C2	549G	549G
25F	8E2	119E3	7D3	280C3	19C3	551D2	549D2
25G	8E2	119F2	119E2	280D2	280D2	551E2	549E
36B	36B	131B	131B	280D3	19D3	551F	549E
36B2	36B2	131C2	131B	280E	280E	551G	549G
36C2	36C2	131D	131D	280E2	280E	551G2	549G
36C3	567D3	131D2	131D	323D2	131D	567B2	567B2
36D	36D2	131E	131E	330	249	567C2	567C2
36D2	36D2	131E2	131E	333	239	567C3	567D3

KNOX COUNTY, ILLINOIS --Continued

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
567D2	567D3						
567D3	567D3						
570C2	134C2						
570D2	134D2						
570E2	134D2						
660C2	660C2						
660D2	660C2						
801	801B						
801B	801B						
802	802B						
802B	802B						
802D	871D						
802E	871G						
802G	871G						
803B	871B						
803D	871D						
803E	871G						
803G	871G						
863	863						
864	864						
865	865						
871B	871B						
871D	871D						
871G	871G						
872B	872B						
873B	872B						
918E2	549E						
918G	549G						
934B	2901B						
935A	2902A						
936E2	8E2						
936F	8E2						
967E	549E						
967E2	549E						
967G	549G						
2036B	2036C						
2036C	2036C						
2901B	2901B						
2902A	2902A						

LEGEND OF MAP UNITS ACCORDING TO ALPHABETICAL SEQUENCE

Pub. Symbol	Approved Map Unit Name
131B	Alvin sandy loam, 2 to 6 percent slopes
131D	Alvin sandy loam, 8 to 15 percent slopes
131E	Alvin sandy loam, 15 to 30 percent slopes
259C2	Assumption silt loam, 5 to 10 percent slopes, eroded
259D2	Assumption silt loam, 10 to 15 percent slopes, eroded
259D3	Assumption silty clay loam, 8 to 15 percent, severely eroded
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded
134B	Camden silt loam, 2 to 5 percent slopes
134C2	Camden silt loam, 5 to 10 percent slopes, eroded
134D2	Camden silt loam, 10 to 18 percent slopes, eroded
257	Clarksdale silt loam
660C2	Coatsburg silty clay loam, 5 to 12 percent slopes, eroded
45	Denny silt loam
239	Dorchester silt loam
386B	Downs silt loam, 2 to 6 percent slopes
536	Dumps, mine
249	Edinburg silty clay loam
119D2	Elco silt loam, 8 to 15 percent slopes, eroded
119E2	Elco silt loam, 15 to 20 percent slopes, eroded
567B2	Elkhart silty clay loam, 3 to 5 percent slopes, eroded
567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded
567D3	Elkhart silty clay loam, 8 to 15 percent slopes, serverely eroded
280B	Fayette silt loam, 2 to 5 percent slopes
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded

LEGEND OF MAP UNITS ACCORDING TO ALPHABETICAL SEQUENCE

Pub. Symbol	Approved Map Unit Name
280D2	Fayette silt loam, 10 to 15 percent slopes, eroded
280E	Fayette silt loam, 15 to 25 percent slopes
344B	Harvard silt loam, 1 to 5 percent slopes
8D2	Hickory silt loam, 10 to 15 percent slopes, eroded
8E2	Hickory silt loam, 15 to 30 percent slopes, eroded
8G	Hickory loam, 30 to 50 percent slopes
77	Huntsville silt loam
43A	Ipava silt loam, 0 to 3 percent slopes
2901B	Ipava-Urban land-Tama complex, 1 to 5 percent slopes
2902A	Ipava-Urban land-Sable complex, 0 to 3 percent slopes
17	Keomah silt loam
451	Lawson silt loam
871B	Lenzburg silty clay loam, 1 to 7 percent slopes
871D	Lenzburg silt loam, 10 to 20 percent slopes
871G	Lenzburg loam, 20 to 70 percent slopes
81B	Littleton silt loam, 1 to 3 percent slopes
549D2	Marseilles silt loam, 10 to 15 percent slopes, eroded
549E	Marseilles silt loam, 15 to 30 percent slopes
549G	Marseilles silt loam, 30 to 60 percent slopes
415	Orion silt loam
801B	Orthents, silty, gently sloping
802B	Orthents, loamy, gently sloping
863	Pits, clay
865	Pits, gravel
864	Pits, quarries

LEGEND OF MAP UNITS ACCORDING TO ALPHABETICAL SEQUENCE

Pub. Symbol	Approved Map Unit Name
74	Radford silt loam
872B	Rapatee silty clay loam, 1 to 7 percent slopes
279B	Rozetta silt loam, 1 to 5 percent slopes
279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded
68	Sable silty clay loam
107+	Sawmill silty clay loam, overwash
19C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded
19D3	Sylvan silty clay loam, 10 to 15 percent slopes, severely eroded
36B	Tama silt loam, 1 to 4 percent slopes
36B2	Tama silty clay loam, 2 to 5 percent slopes, eroded
36C2	Tama silty clay loam, 5 to 10 percent slopes, eroded
36D2	Tama silty clay loam, 10 to 15 percent slopes, eroded
2036C	Tama-Urban land complex, 3 to 10 percent slopes
533	Urban land
104	Virgil silt loam

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

1. Data for which forms SCS-SOILS-8 have been prepared:
University of Illinois Pedology Laboratory

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Atlas	78IL-095-22	7D3	Atlas; typical pedon
Clarksdale	77IL-095-82	257	Clarksdale
Clarksdale	78IL-095-53	257	Clarksdale; typical pedon
Downs	80IL-095-21	386B	Downs
Downs	80IL-095-62	386B	Downs
Fayette	77IL-095-43	280B	Fayette. (Partial profile data.)
Strip Mine	77IL-095-74	871D	Lenzburg
Strip Mine	77IL-095-76	871B	Lenzburg
Strip Mine	77IL-095-77 (also S79IL-095-077)1/	871B	Lensburg; typical pedon
Orthents, loamy	78IL-095-33	871G	Lenzburg loamy
Strip Mine (Maquon)	S79IL-095-056 1/	871B	Lenzburg
Strip Mine (Maquon)	S79IL-095-057 1/	871B	Lenzburg
Shale Soil (Unnamed)	78IL-095-61	549E	Marseilles; typical pedon
Shale Soil (Unnamed)	78IL-095-74	549E	Marseilles
Shale Soil (Unnamed)	78IL-095-76	549E	Marseilles
Orion	78IL-095-32	415	Taxadjunct to the Orion series. Fine-silty, mixed, nonacid, mesic Aquic Udifluvents. Typical pedon.

1/ Data from NSSL for bulk density study.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Strip Mine (Fine-silty)	79IL-095-33	872B	Rapatee
Strip Mine (Fine-silty)	79IL-095-35	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-36	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-44	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-45	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-46	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-50 (also S79IL-095-050)	872B 1/	Rapatee
Strip Mine (Fine-loamy)	79IL-095-51	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-52	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-53	872B	Rapatee
Strip Mine (Fine-loamy)	79IL-095-54	872B	Rapatee
Strip Mine (Fine-silty)	79IL-095-58 (also S79IL-095-058)	872B 2/	Rapatee; type location of the series.
Strip Mine (Fine-silty)	79IL-095-59 (also S79IL-095-059)	872B 2/	Rapatee
Strip Mine (Fine-silty)	79IL-095-60 (also S79IL-095-060)	872B 2/	Rapatee
Strip Mine (Fine-silty)	79IL-095-61	872B	Rapatee
Strip Mine (Fine-silty)	79IL-095-63	872B	Rapatee
Strip Mine (Fine-silty)	79IL-095-64	872B	Rapatee

2/ Data from NSSL for bulk density study.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Strip Mine (Fine-silty)	79IL-095-65	872B	Rapatee
Rozetta	77IL-095-32	279B	Rozetta
Rozetta	77IL-095-49	279B	Rozetta; classifies OK, but mottles are higher in the solum than defined for the Rozetta series. (Partial profile data.)
Rozetta	77IL-095-64	279B	Rozetta; mottles are higher in the solum than defined for the Rozetta series.
Fayette	77IL-095-81	279C2	Rozetta. (Partial profile data.)

2. Data for which forms SCS-SOILS-10 have been prepared.

Pedons that support the soil series:

Elco silt loam	S78IL-095-24	119E2	Elco
Ipava silt loam	S78IL-095-16	43A	Ipava
Keomah silt loam	S78IL-095-3	17	Keomah
Strip Mine (Maquon)	S77IL-095-77	871B	Lenzburg
Shale Soil (Unnamed)	S78IL-095-61	549G	Marseilles
Strip Mine (Fine-silty)	S79IL-095-33	872B	Rapatee
Rozetta silt loam	S78IL-095-6	279B	Rozetta
Sylvan silty clay loam	S78IL-095-1	19D3	Sylvan

Other pedons with engineering test data:

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Atlas silty clay loam	S78IL-095-22	7D3	Atlas
Orion silt loam	S78IL-095-32	415	Taxadjunct to Orion series. Fine-silty, mixed, nonacid, mesic Aquic Udifluvents.
Strip Mine (Fine-loamy)	S79IL-095-50	872B	Rapatee
Rushville silt loam	S79IL-095-24	45	Rushville. Mapped as inclusion in Denny.

3. Other supporting soil characterization data from University of Illinois Pedology Laboratory.

Hickory	77IL-095-80	7D3	Ursa. Mapped as inclusion in Atlas.
Clarksdale	77IL-095-53	257	Atterberry. Mapped as inclusion in Clarksdale. (Partial profile data.)
Clarksdale	80IL-095-63	257	Taxadjunct to Clarksdale series. Fine, monmorillonitic, mesic Mollic Ochraqualfs. Mapped as inclusion in Clarksdale.
Clarksdale	80IL-095-64	257	Atterberry. Mapped as inclusion in Clarksdale.
Elco	78IL-095-41	119D2	Elco, severely eroded. Mapped as inclusion in Elco.
Keomah	77IL-095-65	17	Keomah. (Partial profile data.)
Strip Mine	77IL-095-75	871D	Taxadjunct to the Lenzburg series. Fine-silty, mixed (calcareous) mesic Typic Udorthents. Mapped as inclusion in Lenzburg.
Orthents, loamy	78IL-095-34	871B	Taxadjunct to the Lenzburg series. Fine-silty, mixed (calcareous), mesic Typic Udorthents. Mapped as inclusion in Lenzburg.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Orthents, loamy	78IL-095-36	871D	Taxadjunct to the Lenzburg series. Fine-silty, mixed (calcareous), mesic Typic Udorthents. Mapped as inclusion in Lenzburg.
Orthents, loamy	78IL-095-37	871B	Taxadjunct to Lenzburg series. Fine-silty, mixed (calcareous), mesic Typic Udorthents. Mapped as inclusion in Lenzburg.
Orthents, loamy	78IL-095-38	871D	Taxadjunct to Lenzburg series. Fine-silty, mixed (calcareous), mesic Typic Udorthents. Mapped as inclusion in Lenzburg.
Orthents, loamy	78IL-095-39	871D	Taxadjunct to Lenzburg series. Fine-silty, mixed (calcareous), mesic Typic Udorthents. Mapped as inclusion in Lenzburg.
Orthents, loamy	78IL-095-40	871G	Taxadjunct to Lenzburg series. Fine-silty, mixed, nonacid, mesic Typic Udorthents. Mapped as inclusion in Lenzburg.
Gosport	77IL-095-9	549G	Taxadjunct to Marseilles series. Fine-silty, mixed, mesic Typic Dystrochrepts. Mapped as inclusion in Marseilles.
Gosport Variant	77IL-095-78	549G	Taxadjunct to Marseilles series. Fine-silty, mixed, mesic Dystric Eutrochrepts. Mapped as inclusion in Marseilles.
Gosport Variant	77IL-095-79	549E	Taxadjunct to Marseilles series. Fine-loamy, mixed, mesic Aquic Hapludalfs. Mapped as inclusion in Marseilles.
Gosport Variant	77IL-095-86	549E	Variant of the Gosport series. Fine, illitic, mesic Typic Eutrochrepts. Mapped as inclusion in Marseilles.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Shale Soil (Unnamed)	78IL-095-54	549E	Variant of the Marseilles series. Fine-loamy, mixed, mesic Dystric Eutrochrepts. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-57	549E	Taxadjunct to the Marseilles series. Fine-loamy, mixed, mesic Typic Hapludalfs. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-58	549G	Variant of the Marseilles series. Fine, illitic, mesic Typic Hapludalfs. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-60	549E	Variant of the Marseilles series. Fine, illitic, mesic Typic Hapludalfs. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-62	549D2	Taxadjunct to the Marseilles series. Fine-loamy, mixed, mesic Typic Hapludalfs. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-65	549E	Variant of the Marseilles series. Fine, illitic, mesic Ultic Hapludalfs. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-66	549E	Taxadjunct to the Marseilles series. Fine-loamy, mixed, mesic Dystic Eutrochrepts. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-73	549E	Variant of the Marseilles series. Fine, illitic, mesic Ultic Hapludalfs. Mapped as inclusion in Marseilles.
Shale Soil (Unnamed)	78IL-095-75	549E	Marseilles

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Strip Mine (Fine-silty)	79IL-095-34	872B	Taxadjunct to the Rapatee series. Fine-loamy, mixed, nonacid, mesic Typic Udorthents. Mapped as inclusion in Rapatee.
Strip Mine (Fine-loamy)	79IL-095-55	872B	Taxadjunct to the Rapatee series. Fine-loamy, mixed, nonacid, mesic Typic Udorthents. Mapped as inclusion in Rapatee.
Rozetta	77IL-095-33	279B	Taxadjunct to the Rosetta series. Fine-silty, mixed mesic Aquic Hapludalfs. (Partial profile data.) Mapped as inclusion in Rozetta.
Sylvan	78IL-095-1	19D3	Sylvan; typical pedon

Notes to Accompany Classification and Correlation of the Soils of Knox County, Illinois

by
J. Wiley Scott and Steve R. Base

ASSUMPTION SERIES
These soils are taxadjunct to the Assumption series because they lack a mollic epipedon due to erosion.

ELKHART SERIES
These soils are taxadjunct to the Elkhart series because they lack a mollic epipedon due to erosion.

FAYETTE SERIES
The Bt horizon in these soils is thicker than the defined range of the Fayette series, and the thickness of the solum is on the maximum end of the range.

HUNTSVILLE SERIES
Type location of the series.

IPAVA SERIES
Type location of the series.

KEOMAH SERIES
These soils have free calcium carbonates in the upper part of the C horizon which is not typical of the Keomah series.

ORION SERIES
These soils are taxadjunct to the Orion series because they contain more than 18 percent clay in the control section.

RAPATEE SERIES
Type location of the series.

TAMA SERIES
The soils in map units 36B2, 36C2, 36D2, and 2036C are taxadjuncts to the Tama series because they lack a mollic epipedon due to erosion.

CLASSIFICATION OF THE SOILS

[An asterisk in the first column indicates a taxadjunct to the series. See notes for a description of those characteristics of this taxadjunct that are outside the range of the series]

Soil name	Family or higher taxonomic class
Alvin	Coarse-loamy, mixed, mesic Typic Hapludalfs
*Assumption	Fine-silty, mixed, mesic Typic Argiudolls
Atlas	Fine, montmorillonitic, mesic, sloping Aeric Ochraqualfs
Camden	Fine-silty, mixed, mesic Typic Hapludalfs
Clarksdale	Fine, montmorillonitic, mesic Udollic Ochraqualfs
Coatsburg	Fine, montmorillonitic, mesic, sloping Typic Argiaquolls
Denny	Fine, montmorillonitic, mesic Mollic Albaqualfs
Dorchester	Fine-silty, mixed (calcareous), mesic Typic Udifluvents
Downs	Fine-silty, mixed, mesic Mollic Hapludalfs
Edinburg	Fine, montmorillonitic, mesic Typic Argiaquolls
Elco	Fine-silty, mixed, mesic Typic Hapludalfs
*Elkhart	Fine-silty, mixed, mesic Typic Argiudolls
Fayette	Fine-silty, mixed, mesic Typic Hapludalfs
Harvard	Fine-silty, mixed, mesic Mollic Hapludalfs
Hickory	Fine-loamy, mixed, mesic Typic Hapludalfs
Huntsville	Fine-silty, mixed, mesic Cumulic Hapludolls
Ipava	Fine, montmorillonitic, mesic Aquic Argiudolls
Keomah	Fine, montmorillonitic, mesic Aeric Ochraqualfs
Lawson	Fine-silty, mixed, mesic Cumulic Hapludolls
Lenzburg	Fine-loamy, mixed (calcareous), mesic Typic Udorthents
Littleton	Fine-silty, mixed, mesic Cumulic Hapludolls
Marseilles	Fine-silty, mixed, mesic Typic Hapludalfs
*Orion	Coarse-silty, mixed, nonacid, mesic Aquic Udifluvents
Orthents	Loamy, mixed, mesic Udorthents
Radford	Fine-silty, mixed, mesic Fluvaquentic Hapludolls
Rapatee	Fine-silty, mixed, nonacid, mesic Typic Udorthents

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Rozetta	Fine-silty, mixed, mesic Typic Hapludalfs
Sable	Fine-silty, mixed, mesic Typic Haplaquolls
Sawmill	Fine-silty, mixed, mesic Cumulic Haplaquolls
Sylvan	Fine-silty, mixed, mesic Typic Hapludalfs
Tama	Fine-silty, mixed, mesic Typic Argiudolls
Virgil	Fine-silty, mixed, mesic Udollic Ochraqualfs